



RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/042,059A

DATE: 04/22/2002
TIME: 10:20:26

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\04222002\J042059A.raw

ENTERED

3 <110> APPLICANT: Rhein Biotech Gesellschaft fur neue biotechnologische Prozesse und
4 Produkte mbH
6 <120> TITLE OF INVENTION: Nucleic Acid Molecule Containing a Nucleic Acid Coding for a
Polypeptide

7 with Chorismante Mutase Activity
9 <130> FILE REFERENCE: PA30558US-019
11 <140> CURRENT APPLICATION NUMBER: US 10/042,059A
12 <141> CURRENT FILING DATE: 2001-10-25
14 <150> PRIOR APPLICATION NUMBER: DE 199 19 124.7
15 <151> PRIOR FILING DATE: 1999-04-27
17 <160> NUMBER OF SEQ ID NOS: 3
19 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 843
23 <212> TYPE: DNA
24 <213> ORGANISM: Hansenula polymorpha
26 <400> SEQUENCE: 1

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29 tcggtatata aagtcaacca gttccctatt cccaacttcg acggctcgtt cttggactgg 180
30 ctgttgtcgc agcacgagcg aatccattcg caggtgagga gatacgacgc gccagacgag 240
31 gtgccttttt tccccaacgt gctggaaaaa acgtttctgc ccaagatcaa ctaccatcg 300
32 gtgctagcct cctacgcgga tgaatcaaac gtcaacaaag agatactcaa gatctacacg 360
33 tcagagatag taccaggaat agctgcaggc agcggagagc aggaggacaa ccttggctcg 420
34 tgcgcaatgg ccgacatcga gtgcctgcag tcgctatcca gaagaatcca ttttggccgt 480
35 tttgtcgcag aggctaaatt tatcagttag ggggacaaga ttgtggatct gatcaaaaag 540
36 agagatgtgg aaggcattga ggcgtcatc acaaacgccg aggtcgaaaa acggatcttg 600
37 gacagacttc tggagaaggg aaggcggtat ggaacagacc cgacactaaa gttcacgcag 660
38 cacattcaga gcaaggtgaa gcccaggggtg attgtgaaaa tctacaagga tttcgtgatt 720
39 ccgctcacga agaaggtcga agtcgactac ttgctgagac ggctggagga cgaggaggac 780
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41 tag

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843

43 <210> SEQ ID NO: 2
44 <211> LENGTH: 280
45 <212> TYPE: PRT
46 <213> ORGANISM: Hansenula polymorpha
48 <400> SEQUENCE: 2

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49 Met Asp Phe Met Lys Pro Glu Thr Val Leu Asp Leu Gly Asn Ile Arg
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53 20 25 30
55 Arg Ser Gln Phe Tyr Ala Ser Pro Ser Val Tyr Lys Val Asn Gln Phe
56 35 40 45
58 Pro Ile Pro Asn Phe Asp Gly Ser Phe Leu Asp Trp Leu Leu Ser Gln

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59      50      55      60
61 His Glu Arg Ile His Ser Gln Val Arg Arg Tyr Asp Ala Pro Asp Glu
62 65      70      75      80
64 Val Pro Phe Phe Pro Asn Val Leu Glu Lys Thr Phe Leu Pro Lys Ile
65      85      90      95
67 Asn Tyr Pro Ser Val Leu Ala Ser Tyr Ala Asp Glu Ile Asn Val Asn
68      100      105      110
70 Lys Glu Ile Leu Lys Ile Tyr Thr Ser Glu Ile Val Pro Gly Ile Ala
71      115      120      125
73 Ala Gly Ser Gly Glu Gln Glu Asp Asn Leu Gly Ser Cys Ala Met Ala
74      130      135      140
76 Asp Ile Glu Cys Leu Gln Ser Leu Ser Arg Arg Ile His Phe Gly Arg
77 145      150      155      160
79 Phe Val Ala Glu Ala Lys Phe Ile Ser Glu Gly Asp Lys Ile Val Asp
80      165      170      175
82 Leu Ile Lys Lys Arg Asp Val Glu Gly Ile Glu Ala Leu Ile Thr Asn
83      180      185      190
85 Ala Glu Val Glu Lys Arg Ile Leu Asp Arg Leu Leu Glu Lys Gly Arg
86      195      200      205
88 Ala Tyr Gly Thr Asp Pro Thr Leu Lys Phe Thr Gln His Ile Gln Ser
89      210      215      220
91 Lys Val Lys Pro Glu Val Ile Val Lys Ile Tyr Lys Asp Phe Val Ile
92 225      230      235      240
94 Pro Leu Thr Lys Lys Val Glu Val Asp Tyr Leu Leu Arg Arg Leu Glu
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97 Asp Glu Glu Asp Asp Asp Ala Thr Gln Lys Ser Gly Gly Tyr Val Asp
98      260      265      270
100 Arg Phe Leu Ser Ser Gly Leu Tyr
101      275      280
104 <210> SEQ ID NO: 3
105 <211> LENGTH: 1655
106 <212> TYPE: DNA
107 <213> ORGANISM: Hansenula polymorpha
109 <220> FEATURE:
110 <221> NAME/KEY: gene
111 <222> LOCATION: (1)..(1655)
112 <223> OTHER INFORMATION: 1,8 kb genomic DNA-Fragment from Hansenula
113 polymorpha
115 <400> SEQUENCE: 3
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118 acgattacat tggcggaacg tatcgcgagt cgctcacgag acgcattaga atgacagaga 180
119 aatcgcgaaa cgaccttata gacgcacgtg aaaactacgg gtttggaggc agcaaggagg 240
120 agcgaatcca gcggtttttg tggttcagac atctttcgtg gcttttaggc gaggataagc 300
121 gaacttgagg agcgtttttt ttttctgttt tagtttttgt aggtatggac tttatgaagc 360
122 cagaaacagt gctggacctt ggcaacatta gagatgcctt ggtccggatg gaggatacga 420
123 tcatcttcaa ctttatcgag cggtcgagc tctatgcgtc gccctcggta tacaaagtca 480
124 accagttccc tattcccaac ttcgacggct cgttcttgga ctggctgttg tcgcagcacg 540
125 agcgaatcca ttcgcagggtg aggagatacgc acgcgccaga cgaggtgcct tttttcccca 600

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126 acgtgctgga aaaaacgttt ctgccaaga tcaactaccc atcggtgcta gcctcctacg 660
127 cggatgaaat caacgtcaac aaagagatac tcaagatcta cacgtcagag atagtaccag 720
128 gaatagctgc aggcagcgga gagcaggagg acaaccttgg ctcgtagcga atggccgaca 780
129 tcgagtgcct gcagtcgcta tccagaagaa tccatttttg ccgttttgtc gcagaggcta 840
130 aatttatcag tgagggggac aagattgtgg atctgatcaa aaagagagat gtggaaggca 900
131 ttgaggcgct catcacaac gccgaggctg aaaaacggat cttggacaga cttctggaga 960
132 agggaagggc gtatggaaca gaccgacac taaagttcac gcagcacatt cagagcaagg 1020
133 tgaagcccga ggtgattgtg aaaatctaca aggatttcgt gattccgctc acgaagaagg 1080
134 tcgaagtcga ctacttgctg agacggctgg aggacgagga ggacgatgat gcgacgcaga 1140
135 aaagcggcgg ctacgttgac cggtttctct cctctggctt gtactagaaa ttaaaatttt 1200
136 cagtacttta attattctcg aattctagtt cagataccgc atggtaattt caaaggccag 1260
137 aaaagtggcc gcgttggtg gggcagctct cagaatagtc ggcgagaatc ctttgactag 1320
138 cccccaggca ccgctctgtc tccaaatacc cctaatagtc tcaacagcat ttctataaac 1380
139 cagcttcttg tagttgtccg tctgcatgtt ggacttgatc acatcgatcg gataaatact 1440
140 gaaccacatc ccgtaacctg ccagcgcccc aaagacgcag agcttccagt tctcgatgtc 1500
141 cttcctggca atattccgcg actcgatctc gtttttcacg agagcttcaa aagtcagaaa 1560
142 atacgctccg ctacccaaac tttctcttgc cagcgtaggt cccagacccc ggtagattaa 1620
143 cttgatgcct cccgtatggt acagcttctt gatcc 1655
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